

ABSTRACT

TRANSVAGINAL SONOGRAPHIC MEASUREMENT OF CERVICAL LENGTH DURING MIDTRIMESTER IN PREDICTING PRETERM LABOUR IN ASYMPTOMATIC SINGLETON PREGNANCIES

Dr.C.Madhumitha MS OG, Govt theni Medical College

INTRODUCTION:

Preterm birth is defined as birth between the age of viability and 37 completed weeks of gestation. Incidence of preterm birth ranges between 5 to 21% in India. With better screening test and availability of treatment strategies to defer preterm labour, the major burden of preterm delivery can be reduced. Transvaginal sonographic measurement of cervical length is the best available method in prediction of spontaneous preterm birth.

AIMS AND OBJECTIVES:

1. To determine cervical length by transvaginal sonography in asymptomatic singleton pregnancies between 18-26 weeks of gestation.
2. To establish the relationship between cervical length measured at mid- trimester and their time of delivery.
3. To assess the potential value of routine cervical length measurement in singleton pregnancy between 18-26 weeks in the prediction of risk for preterm delivery.

MATERIALS AND METHODS:

This is a prospective observational study conducted at Govt Theni Medical college and hospital during July 2016 to June 2017 among 200 patients. Cervical length estimation done between 18 to 26 weeks gestation and patients were followed up till delivery. All singleton pregnancies excluding polyhydramnios with or without high risk factors for preterm delivery were included. Cervical length <2.5cm was taken as cutoff.

RESULTS:

Among these 200 study population, 100 had no identifiable high risk factors for preterm delivery and 100 were with high risk factors for the same. The results were statistically analysed. Out of 200 patients studied, 41 cases had short cervix which constitutes 20.5% of the population. About 159 patients had cervical length more than 25mm which constitutes 79.5%. Out of 41 patients with cervical length less than 25mm. Around 25 patients delivered preterm and 14 patients out of 32 who had cervical length between 26-30mm delivered preterm. The results showed that the sensitivity of this test is 58% and specificity is 89%. The efficiency of the test is 83% and positive predictive value is 60%, negative predictive value is 89%. False positive rate is 10% and false negative rate is 42%.

CONCLUSION:

Preterm delivery and its effect on perinatal and neonatal morbidity and mortality is a global issue which needs significant attention among health care personnel. Prediction of preterm labour by suitable effective and reliable method is a boon to save innumerable young

lives. Transvaginal sonographic determination of cervical length in women with asymptomatic singleton pregnancy is both cost effective and has good validity as an effective screening test.

keywords: Preterm, cervical length, short cervix, transvaginal